



Indiana Department of Environmental Management  
Office of Air Management  
Rule Fact Sheet  
September 6, 2000

**DEVELOPMENT OF NEW RULES CONCERNING THE INCORPORATION OF  
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR  
PORTLAND CEMENT MANUFACTURING INDUSTRY  
#00-71(APCB)**

**Overview**

This rulemaking incorporates by reference national emission standards for hazardous air pollutants for portland cement manufacturing industry under 40 CFR 63, Subpart LLL, 64 FR 31898, June 14, 1999, and applies to each portland cement manufacturing plant at any facility which is a major source or an area source, with the exception of portland cement kilns and in-line kiln or raw mills subject to 40 CFR 63, Subpart EEE.

**Citations Affected**

Adds: 326 IAC 20-27-1

**Affected Persons**

This rule affects each portland cement manufacturing plant that is a major or an area source. Cement kilns that combust municipal solid waste, medical waste or other material (other than hazardous waste) are subject to this rule. There are four sources in Indiana subject to this rule. This rule affects the community in the vicinity of each portland cement plant subject to the rule.

**Potential Cost**

The potential cost of this rulemaking is expected to be low, since affected sources are already subject to federal rule.

**Outreach**

IDEM mailed the first and second notices requesting comments regarding this rulemaking to affected sources and interested parties.

**Description**

On June 14, 1999, U.S. EPA published a final rule for the portland cement manufacturing industry under 40 CFR 63, Subpart LLL (64 FR 31898). This NESHAP applies to portland cement manufacturing plants that are major or area sources. Major sources are sources that emit or have the potential to emit at least ten (10) tons per year of any hazardous air pollutant or twenty-five (25) tons per year of any combination of hazardous air pollutants. Area sources are stationary sources of hazardous air pollutants that are not major sources. Additionally, major sources are subject to Title V permitting requirements. Cement kilns that combust municipal solid waste, medical waste or other material (other than hazardous waste) are subject to this rule. The rule covers the kiln and raw material dryer at major and area sources. The rule also covers the clinker cooler, raw mill, finish mill, material bins, conveying system transfer point, bagging system, and bulk loading or unloading system. Kilns that fire hazardous wastes are subject to Subpart EEE, national emission standard for

hazardous air pollutants for hazardous waste combustors, and are not subject to the kiln emission limits under Subpart LLL.

The rule contains emission limits for certain hazardous air pollutants, performance testing requirements, maintenance requirements for control devices, monitoring, recordkeeping, and reporting. Kilns and other processes at major sources have emission limits for particulate matter and opacity. Although area sources are not subject to the particulate matter and opacity emission limits in this NESHAP, they are subject to similar particulate matter and opacity emission limits under the new source performance standards for portland cement plants (40 CFR 60, Subpart F). The new source performance standards apply to units that were constructed or modified after August 17, 1971. Particulate matter is controlled by fabric filter or electrostatic precipitator, the same control already required by the new source performance standards. The federal rule was developed under Section 112 of the Clean Air Act, which has no statutory requirement for regulation of individual hazardous air pollutant metals. The particulate matter limit serves as a surrogate limit for the non-volatile and semi-volatile hazardous air pollutant metals.

Dioxin/furan limits are also required for all sources. Dioxin/furan emissions are controlled by temperature control at the inlet particulate matter control device. New kilns located at a greenfield site are subject to a hydrocarbon limit. New kilns at existing sites are not subject to the hydrocarbon limit. The technology used to meet this hydrocarbon limit, which consists of site selection of feed material with low levels of naturally occurring organic material, is cost prohibitive for existing facilities.

Monitoring requirements include particulate matter continuous emissions monitoring systems. However, since U.S. EPA has not finalized the performance specification for the

use of particulate matter continuous emissions monitoring systems at cement kilns or resolved technical issues, the effective date of the requirement to install and operate these monitoring systems has been deferred. Until the particulate matter continuous emissions monitoring systems requirements are promulgated, there are requirements for an initial particulate matter continuous emissions monitoring systems performance test and testing every five (5) years thereafter, plus opacity monitoring. There is also a requirement for an initial performance test for dioxin/furans and testing every thirty (30) months thereafter. The rule includes a requirement for inspection of the combustion system components of kilns, an energy reduction measure.

U.S. EPA has estimated that annual emissions of particulate matter will be reduced nationally by five thousand two hundred (5,200) tons, a twenty-four percent (24%) reduction for existing portland cement plants. Hazardous air pollutant metals from existing sources will be reduced by thirty-eight (38) tons, or twenty-five percent (25%), annually and dioxin/furan emissions by thirty-three thousandths (0.033) pounds, or thirty-six percent (36%), annually. Particulate matter emissions reductions in Indiana will depend on how many of the existing sources are already subject to the new source performance standards for portland cement plants. There may be additional particulate matter emissions reductions when the particulate matter continuous emissions monitoring systems requirement is promulgated since there will be continuous monitoring instead of periodic stack testing, which may lead to more consistent compliance with the new limits.

### **Consideration of Factors Outlined in Indiana Code 13-14-8-4**

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account the following:

- 1) All existing physical conditions and the character of the area affected.
- 2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.
- 3) Zoning classifications.
- 4) The nature of the existing air quality or existing water quality, as appropriate.
- 5) Technical feasibility, including the quality conditions that could be reasonably be achieved through coordinated control of all factors affecting the quality.
- 6) Economic reasonableness of measuring or reducing any particular type of pollution.
- 7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to:
  - (A) human, plant animal, or aquatic life; or
  - (B) the reasonable enjoyment of life and property.

### **Consistency with Federal Requirements**

The new rules are consistent with federal rules.

### **IDEM Contact**

Additional information regarding this rulemaking action can be obtained by calling (800) 451-6027 (in Indiana), press 0 and ask for Chrystal Amr, Rule Development Section, Office of Air Management, (or extension 4-1203) or dial (317) 234-1203.